

PIANO CHORDS GENERATION FROM AUDIO

Warnakulasuriya Shanilka Marin Fernando

A dissertation submitted in partial fulfilment of the requirement for
Bachelor of Science (Honours) degree in Computer Science

School of Computing

Informatics Institute of Technology, Sri Lanka

**in collaboration with
University of Westminster, UK**

2022

ABSTRACT

Piano chords recognition is most popular area in the music domain. Most people like hear or play the piano. Since, most people don't know to play the chords or to identify the piano chords. During these times most of research have been done in this domain to generate the chords but most of the research has done generating the first chord of the song, estimating the chords and generating only the major chords. In this paper the author has implemented a system to generate 10 piano chords from a wav file using deep learning classification and pitch class profile algorithm. The classification method was trained by using Fourier transformed data for each chord. The model gave 98.25% accuracy. By testing with piano audio, the system has predicted the piano chords correctly. Since, this research has been done to generate piano chords so, in that point of view this research shows areas which can be more improved in this domain to generate piano chords.

Keyword: Deep learning, classification, piano chords generation